Happy 100th Birthday, Polarography!
- Dedicated to Jaroslav Heyrovsky (1890 – 1967)

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Abstract: Hundred years ago on February 10, Jaroslav Heyrovsky used renewable dropping mercury electrode as a tool for obtaining the current, voltage curve for dissolved solutes in solutions. Thus, polarography was born and has now stood a century as a unique electrochemical method thanks to the renewable fresh metal/solution interface which makes the current, voltage curves absolutely reproducible. The present author learnt this technique using the original galvanometer and photographic paper in her post graduate years. Subsequently she had the pleasure of doing postdoctoral work in Heyrovsky's Institute of Polarography in Prague. Presented here are some of her articles which contribute to the wonders of polarography.

1. Introduction.

The best introduction to the subject is the Nobel Lecture by Jaroslav Heyrovsky (https://www.nobelprize.org/uploads/2018/06/heyrovsky-lecture.pdf). Since then, numerous publications and reviews can be found on polarography. A recent one is by his son, Michael Heyrovsky (Electrochemistry Encyclopedia, 2010: Jaroslav Heyrovsky and polarography in: https://knowledge.electrochem.org/encycl/art-p03-polarography.htm). The section below summarizes the author's contributions to polarography and related electrochemistry.

2. Work on polarography.

The main topics of research by the author: Polarography of compounds which adsorb on mercury and change the half wave potential. A new wet-and-measure polarography for minute volumes of solutions and a new current spike polarography technique for surfaces and films. Establishment of absolute potentials of reference electrodes and half wave potentials. Tables of absolute ionic concentrations of supporting electrolytes. Finally, a new interpretation of the electrocapillary curve based on isotension potentials.

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